Remarks

Status of the Claims

Claims 1-39 are pending in the application. All claims stand rejected. By this paper, claims 1 and 2 have been amended, and claims 38 and 39 have been canceled.

Claims 1-5, 7-15, 18-32, and 34-37 were rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie et al. ("LaJoie") in view of Zustak et al. ("Zustak"). Claims 38 and 39 were rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie in view of Zustak, Macrae et al. ("Macrae"), and Jerding et al. ("Jerding"). Claims 6 and 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie and Zustak in view of Jerding. Claim 33 was rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie and Zustak in view of Klosterman et al. ("Klosterman"). Claim 16 was rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie and Zustak in view of Knudson et al. ("Knudson").

<u>LaJoie</u>

The claimed invention relates to delivering interactive content via "synthetic channels," which mimic television channels within an Electronic Program Guide (EPG). While LaJoie arguably shows a channel table (101) including a channel "16" that can be mapped to "other services," there is absolutely no teaching or suggestion of displaying an indication of the other services as synthetic channels within an EPG. Indeed, LaJoie's EPG, as shown, for example, in FIGs. 16 and 17, only depicts regular television channels broadcasting traditional television programs. LaJoie's

channel table is merely a data structure that is represented in memory. There is no indication that it is ever displayed on a user's screen, let alone in an EPG.

The Office Action apparently agreed with this reasoning, stating that "LaJoie is silent on communicating the interactive content elements via an electronic program guide (EPG) and providing selection of the content elements via an EPG." Office Action at page 3. However, the Office Action goes on to cite Zustak for this conspicuously missing element.

Zustak

Declarations under 37 C.F.R. § 1.131 were filed in connection with the Applicants' previous response to remove Zustak as a reference. As detailed in the previous response, Zustak was filed on April 20, 2001, less than two months before the filing date of the present application. In the Declarations of James A. Billmaier, Anthony F. Istvan, and Robert E. Novak, the inventors declared that they conceived of the claimed invention prior to April 20, 2001. In support of the Declarations, a copy of an e-mail dated prior to April 20, 2001 ("Invention Disclosure"), listing the aforementioned individuals as inventors in Digeo internal matter no. 39 (the present application), was attached to the response.

Because all of the rejections rely on Zustak for the claimed limitation of "communicating the interactive programming content, including the interactive content element and the corresponding synthetic channel, to a viewer via an electronic programming guide," as variously recited in independent claims 1, 11, 22,

28, 35 and 38, the Applicants argued that the removal of Zustak as a reference made these claims allowable.

Alleged Deficiencies of the Rule 131 Declarations

1. Evidence of Conception

Paragraph 3 of the Final Office Action alleges that the Invention Disclosure relied upon by the Applicants to swear behind the reference was no more than "a vague idea of how to solve a problem." Specifically, the Final Office Action stated that "there is no evidence conveying providing selection from the electronic program guide *via a user-actuateable device*," as recited in claim 1. (Emphasis added).

The Applicants respectfully submit that the Office's argument fails for at least three reasons. First, even assuming the Office is correct about claim 1, none of the other independent claims recite "selection from the electronic program guide *via a user-actuateable device.*" Thus, even if claim 1 was not supported by the Invention Disclosure (which the Applicants vigorously deny), the Applicants believe that claim 11, for example, which does not refer to a "user-actuateable device," is unquestionably supported by the Invention Disclosure.

Second, the Applicants submit the statement that "there is no evidence conveying providing selection from the electronic program guide via a user-actuateable device" is manifestly incorrect. The Invention Disclosure clearly states that the user may access the synthetic channels "by directly entering a channel number in their remote control." (Emphasis added). The Applicants respectfully submit that a person of ordinary skill in the art ("POOSITA") at the time the invention

was made would understand a "remote control" to be a type of "user-actuateable device."

Third, the Applicants respectfully submit that "placing [the synthetic channels] in the EPG and allowing users to access them" would be understood by a POOSITA to be accomplished via a "use-actuateable device," such as a remote control, even without the explicit teaching discussed above. The invention is not directed to a particular means for selecting a synthetic channel from an EPG. EPGs are routinely accessed via remote control devices. What is believed to be novel and non-obvious (as taught by the Invention Disclosure) is providing access to other applications or information (e.g., email, calendar, photo albums, news, weather, sports, etc.) using "synthetic channels" in the EPG. The synthetic channels mimic regular broadcast channels in the EPG but represent content other than traditional broadcast content.

Finally, notwithstanding the foregoing, to advance prosecution of this application, the Applicants have canceled the allegedly unsupported language from claim 1. As amended, claim 1 now reads "providing for selection of the synthetic channel corresponding to the interactive content element from the electronic programming guide to access the interactive content element." This limitation is clearly taught by the Invention Disclosure, as shown in greater detail below.

As demonstrated in the following tables, the limitations of each of the independent claims are described in the Invention Disclosure.

a. Claim 1

Claim Language	Support in Invention Disclosure
A method of accessing interactive	"adding interactive content to television
content as part of an interactive television	experience." "The functional [synthetic]
system, the method comprising:	channels provide access to applications
	that run on behalf of the user (email,
	calendar, photo albums, etc.)."
assigning a synthetic channel to correspond to at least one interactive content element available as interactive programming content via the interactive television system;	"The existing programming content is referred to as broadcast channels, while the new interactive content is referred to as synthetic channels." "In order to mimic the behavior of traditional broadcast channels, access to the synthetic channels should be granted in a similar manner. This can include placing them in the EPG or allowing the user to access them by directly entering a
	channel number in the remote control."
communicating the interactive programming content, including the interactive content element and the corresponding synthetic channel, to a viewer via an electronic programming guide; and	"This can include placing [the synthetic channels] in the EPG or allowing the user to access them by directly entering a channel number in the remote control."
providing for selection of the synthetic channel corresponding to the interactive content element from the electronic programming guide to access the interactive content element.	"In order to mimic the behavior of traditional broadcast channels, access to the synthetic channels should be granted in a similar manner." "This can include placing [the synthetic channels] in the EPG or allowing the user to access them by directly entering a channel number in the remote control."

b. Claim 11

Claim Language	Support in Invention Disclosure
A method of accessing interactive	"adding interactive content to television
content as part of an interactive television	experience." "The functional [synthetic]
viewing environment, the method	channels provide access to applications
comprising:	that run on behalf of the user (email,
	calendar, photo albums, etc.)."

Displaying an electronic programming guide including accessible broadcast channels and accessible synthetic channels on a video display device for the interactive television viewing environment;	"The existing programming content is referred to as broadcast channels, while the new interactive content is referred to as synthetic channels." "In order to mimic the behavior of traditional broadcast channels, access to the synthetic channels should be granted in a similar manner. This can include placing them in the EPG or allowing the user to access them by directly entering a channel number in the remote control."
correlating the selected synthetic channel to an interactive content element available by way of the interactive television viewing environment;	"The functional [synthetic] channels provide access to applications that run on behalf of the user (email, calendar, photo albums, etc.)." "In order to mimic the behavior of traditional broadcast channels, access to the synthetic channels should be granted in a similar manner. This can include placing them in the EPG or allowing the user to access them by directly entering a channel number in the remote control."
displaying the interactive content element on the video display device for the interactive television viewing environment.	"In order to mimic the behavior of traditional broadcast channels, access to the synthetic channels should be granted in a similar manner." "This can include placing [the synthetic channels] in the EPG or allowing the user to access them by directly entering a channel number in the remote control."

c. Claim 22

Claim Language	Support in Invention Disclosure
An interactive television network	"The existing typical television
environment, comprising:	environment consists of a television with a connection to a broadcast network that consists of many television channels." "extend the metaphor when adding interactive content to television experience."
a television set;	"The existing typical television environment consists of a television with a connection to a broadcast network that consists of many television channels."

a client terminal having a network interface configured to transmit and receive encoded communication signals, the client terminal being capable of being connected to the television set; and	"The existing typical television environment consists of a television with a connection to a broadcast network that consists of many television channels." A POOSITA understands that televisions are connected to broadcast networks via network interfaces, e.g., set-top boxes (STBs). That such STBs receive encoded communications signals is known in the art.
a broadcast center, the broadcast center capable of communication with the client terminal; and	"The existing typical television environment consists of a television with a connection to a broadcast network that consists of many television channels." Broadcast networks are known to include broadcast centers from which television broadcasts originate.
wherein the broadcast center is configured to transmit an electronic programming guide to the client terminal, the electronic programming guide including:	"In order to mimic the behavior of traditional broadcast channels, access to the synthetic channels should be granted in a similar manner. This can include placing them in the EPG or allowing the user to access them by directly entering a channel number in the remote control." Electronic program guides are known to be transmitted by and received from broadcast centers.
a listing of channels, the channels comprising cable channels and synthetic channels; and	"The existing programming content is referred to as broadcast channels, while the new interactive content is referred to as synthetic channels." "In order to mimic the behavior of traditional broadcast channels, access to the synthetic channels should be granted in a similar manner. This can include placing them in the EPG or allowing the user to access them by directly entering a channel number in the remote control." Cable channels are known to be a form of broadcast channel.
identification of programming content corresponding to each channel; and	"The existing programming content is referred to as broadcast channels, while the new interactive content is referred to as synthetic channels."

wherein the client terminal is further configured:

to receive a command from a viewer to select a channel from the electronic programming guide, wherein the selected channel comprises a synthetic channel;

to transmit an uplink signal to the broadcast center requesting the programming content corresponding to the selected synthetic channel;

to receive a downlink signal from the broadcast center, the downlink signal comprising the programming content; and to transmit the programming content to the television set for display.

"This can include placing [the synthetic channels] in the EPG or allowing the user to access them by directly entering a channel number in the remote control." These limitations recite known interactions between a broadcast center and a network interface (STB), e.g., sending uplink signals, receiving downlink signals, etc.

d. Claim 28

Claim Language	Support in Invention Disclosure
An electronic programming guide,	"In order to mimic the behavior of
comprising:	traditional broadcast channels, access to
	the synthetic channels should be granted
	in a similar manner. This can include
	placing them in the EPG or allowing the
	user to access them by directly entering
	a channel number in the remote control."
a channel field, the channel field	"The existing programming content is
including a listing of available cable	referred to as broadcast channels, while
channels and available synthetic	the new interactive content is referred to
channels; and	as synthetic channels." Electronic
	program guides with "existing
	programming content" inherently require
	a channel "field."
a content field, the content field	"In order to mimic the behavior of
including a current programming	traditional broadcast channels, access to
schedule corresponding to each available	the synthetic channels should be granted
cable channel, and an interactive content	in a similar manner. This can include
element corresponding to each available	placing them in the EPG or allowing the
synthetic channel.	user to access them by directly entering
	a channel number in the remote control."
	In order to "place [synthetic channels] in

an EPG, it would be necessary to indicate what interactive content corresponds to each synthetic channel. Otherwise, the user would not know which synthetic channel to select
which synthetic channel to select.

d. Claim 35

Claim 35 includes limitations derived from claims 22 and 28. The principal difference is the format of the claim (*Beauregard*). Since the Invention Disclosure discloses "applications that run on behalf of the user (email, calendar, photo albums, etc.," the Applicants respectfully submit that a POOSITA would understand that such applications run on a computer and that a computer inherently has a "computer-readable medium containing a set of instructions" to carry out the recited functions.

As demonstrated above, all pending independent claims are fully supported by the Invention Disclosure, which has a date prior to the filing date of Zustak. Accordingly, the Applicants respectfully submit that the Invention Disclosure, which is clearly more than a "vague idea," establishes an earlier date of conception.

2. Evidence of Diligence

Paragraph 4 of the Final Office Action states that "the evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Zustak reference to either a constructive reduction to practice or an actual reduction to practice."

Enclosed herewith as Exhibit A to the Declaration of Hirohisa Tachibana under 37 CFR § 1.131 is the Invention Disclosure in its original form without the date thereof being redacted. The Invention Disclosure was sent by the inventors to

Hirohisa Tachibana, General Counsel of Digeo, Inc. (the assignee) on August 21, 2000. Accordingly, the period of time for which diligence must be shown is from August 21, 2000, to June 8, 2001 (the date of constructive reduction to practice).

The Declaration of Hirohisa Tachibana provides additional evidence of diligence to supplement and corroborate the statements of the inventors. As detailed in the Declaration, the Invention Disclosure was forwarded to outside counsel three days after receipt thereof from the inventors, *i.e.*, August 24, 2001. Outside counsel was instructed to prepare each assigned application, including the above-identified application, as expeditiously as possible. Outside counsel was not instructed to assign a higher or lower priority to the above-identified application than other assigned applications. Furthermore, the present application was not treated any differently from other assigned applications. Thus, the above-identified application was entered into outside counsel's prosecution queue and prepared in the ordinary course of business.

Approximately 112 other patent applications were ahead of the present application. These 112 patent applications, which were filed between August 21, 2000, and June 8, 2001, represented nearly three years of attorney time. The fact that the present application was filed in less than ten months, in light of all of the other applications to be filed, is evidence of diligence in constructively reducing the invention to practice.

The Board of Patent Appeals and Interferences found that an eleven-month period of time from prior to the effective date to the filing of the application satisfied

¹ Based on an estimated 45 hours per application and 1800 attorney hours per year.

the "due diligence" standard.² The Board noted that "as Associate Counsel for Patents, it was not necessary that Mr. McDonnel drop all his other cases and concentrate on the particular invention of the instant application to the exclusion of all others."³ Similarly, in the present case, it was not necessary for outside counsel to drop the 112 applications of the assignee (in addition to their applications for other clients) and concentrate on the above-identified application to the exclusion of all others.

The instant case only involved a period of less than 10 months, during which time the assignee filed 112 other patent applications. Accordingly, the Applicants respectfully submit that the evidence submitted establishes reasonable diligence upon the part of the applicants and the assignee.

Conclusion

In view of the foregoing, the Applicants respectfully submit that all pending claims herein are in condition for allowance. Early allowance of all pending claims is respectfully requested. If the Examiner finds any remaining impediment to the prompt allowance of all claims, the Applicants respectfully request that the Examiner call the undersigned at the telephone number provided below.

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² 1999 WL 33176202 *2 (Bd.Pat.App & Interf.) (unpublished).

Respectfully submitted,

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